
वस्त्रादि — टोपियों के लिये
गुंथित फीते — विशिष्टि
(पहला पुनरीक्षण)

**Textiles — Braided Tapes for
Berets — Specification**
(*First Revision*)

ICS 59.080.30

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by Technical Textiles for Clothtech Applications including Narrow Fabrics and Braids Sectional Committee had been approved by the Textile Division Council.

This standard was first published in 1977 and has been revised now to align it with latest trade practices.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — BRAIDED TAPES FOR BERETS — SPECIFICATION

(First Revision)

1 SCOPE

This standard covers tape for berets made from viscose rayon spun staple yarn.

2 REFERENCES

The standards listed in Annex A contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

3 MANUFACTURE

3.1 Yarn

37 tex (16s) spun from viscose rayon cut staple shall be used.

3.2 Braided Tape

The tape shall be flat braided on 16 spindle machine with 3 ends working as one under even tension, with uniform and firm selvages, and free from all braiding defects. It shall be free from sizing, filling and dressing materials and from substances liable to cause subsequent tendering. It shall normally be dyed black and the dyeing shall be free from stains, streaks etc. Sulphur dyes shall not be used.

4 PHYSICAL REQUIREMENTS

The braided tapes conforming to this standard shall meet the physical requirements given in Table 1.

Table 1 Physical Requirements of Tapes for Berets
(Clause 4)

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Length, m	100 ± 5	IS 1954
ii)	Width, mm	10 ± 2	IS 1954
iii)	Mass, g/100 m	180 ± 10	IS 1964
iv)	Ends in full width, <i>Min</i>	48	IS 1963
v)	Breaking strength, N (kgf), <i>Min</i> (25 cm \times full width)	216 (22)	IS 1969 (Part 1)

5 CHEMICAL REQUIREMENTS

The braided tapes shall meet the chemical requirements given in Table 2.

Table 2 Chemical Requirements of Tapes for Berets
(Clause 5)

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	pH value	5.5 to 8.5	IS 1390
ii)	Colour fastness to		
	a) Artificial light	4 or better	IS/ISO 105-B02
	b) perspiration	4 or better	IS 971
	c) Washing test, No. 2	4 or better	IS/ISO 105-C10
	d) Organic solvents	4 or better	IS 688

7 PACKING AND MARKING

7.1 Packing

The tapes shall be made into light rolls. The rolls shall be arranged in cylindrical bundles and shall be secured by twine of adequate strength. These bundles shall be wrapped in two layers of kraft paper (*see* IS 1397) followed by a third layer of waterproof packing paper (*see* IS 1398) and finally with an outer layer of cloth, heavy cee (*see* IS 3751) to form a bale.

7.2 Marking

Each roll of tape shall be legibly marked with the following information:

- Name of the material;
- Width of tape (mm);
- Length of roll (m);
- Lot/Batch no.; and
- Indication of the source of manufacture.

7.2.1 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

8 SAMPLING

8.1 The lot shall consist of all the tape rolls delivered against same despatch note.

8.2 Unless otherwise sampling plan may be specified in the contract or order the sampling plan as given in Table 3 may be used for inspecting and testing of tapes against this standard:

Table 3 Sampling Plan for Braided Tapes

(Clause 8.2)

Lot Size	Sample Size (For Length, Width, Mass and Ends in Full Width)	Permissible No. of Defectives	Sub-sample Size (For Remaining Requirements)
(1)	(2)	(3)	(4)
Up to 100	8	0	3
101 to 300	13	1 (see NOTE 1)	4
301 to 500	20	1	5
501 to 1000	32	2	7
1001 and above	50	3	10

NOTES

1 In the case of length, the value obtained for the length of each roll shall be compared with its specified, declared or marked length. The mean percentage of deficiency in length, if any, shall be determined and made applicable to the lot.

2 In respect of mass and breaking strength Mean \pm 0.4 Range shall not outpass specified values.

3 In respect of colour fastness, no failure shall be permissible.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
IS/ISO 105-B02 : 2014	Textiles — Tests for colour fastness: Part B02 Colour fastness to artificial light — Xenon arc fading lamp test (superseding IS 2454 : 1985)	1390 : 2019/ ISO 3071 : 2005	Textiles — Determination of pH of aqueous extract (<i>second revision</i>)
		1954 : 1990	Determination of length and width of woven fabrics — Methods
IS/ISO 105-C10 : 2006	Textiles — Tests for colour fastness: Part C10 Colour fastness to washing with soap or soap and soda (superseding IS 687:1979, IS 764 : 1979, IS 765 : 1979, IS 3361 : 1979 and IS 3417 : 1979)	1963 : 2004	Methods for determination of threads per unit length in woven fabrics
		1964 : 2001	Methods for determination of mass per unit length and mass per unit area of fabrics
688 : 1988	Method for determination of colour fastness of textile materials to organic solvents (<i>first revision</i>)	IS 1969 (Part 1) : 2018 /ISO 13934-1 : 2013	Textiles — Tensile properties of fabrics: Part 1 Determination of maximum force and elongation at maximum force using the strip method

ANNEX B*(Foreword)***COMMITTEE COMPOSITION**

Technical Textiles for Clothtech Applications including Narrow
Fabrics and Braids, TXD 39

<i>Organization</i>	<i>Representative(s)</i>
Senior Quality Assurance Establishment Directorate General of Quality Assurance Ministry of Defence	SHRI A. CHOWDHURY (<i>Chairman</i>)
Federation of Indian Chambers of Commerce and Industry, New Delhi	SHRI ANU HANDA
ICAR-Central Institute for Research on Cotton Technology, Mumbai	DR P. JAGAJANANTHA DR T. SENTHILKUMAR (<i>Alternate</i>)
Indian Technical Textile Association, Mumbai	DR ANUP RAKSHIT SHRI VIKRAM JAIN (<i>Alternate</i>)
M K U Limited, Kanpur	SHRI SUMIT KHANDELWAL SHRI RAJIB PAL (<i>Alternate</i>)
Motilal Dulichand Pvt Ltd, Kanpur	SHRI SHAILENDRA NATH MISRA SHRI SUDHIR SHIVHARE (<i>Alternate</i>)
National Textile Corporation, New Delhi	SHRI R. K. YADAV
Ordnance Parachute Factory, Kanpur	SHRI V. M. BAGADE SHRI S. KONDAIAH (<i>Alternate</i>)
Planet Analysis Pvt Ltd, Kanpur	SHRI PRASHANTA BISWAS
SGS Limited, Gurugram	SHRI GAURAV SARSWAT SHRI ASHISH RAWAT (<i>Alternate</i>)
Shipra International, Kanpur	SHRI ABHISHEK KUMAR AGRAWAL
S L Banthia Textiles Industries Pvt Ltd	SHRI SANTOSH KUMAR BANTHIA
Textiles Committee, New Delhi	SHRI SANJAY KUMAR KORVI SHRI H. K. GAUR (<i>Alternate</i>)
Thanawala & Co, Mumbai	SHRI HEMAL THANAWALA SHRI UPENDRA THANAWALA (<i>Alternate</i>)
The Bombay Textile Research Association, Mumbai	SHRI SHAIKH RIYAZ AHMED DR PRASANTA KUMAR PANDA (<i>Alternate</i>)
The Office of Textile Commissioner, Mumbai	SHRI AMAR K. CHAPHEKAR SHRI HUMAYUN K. (<i>Alternate</i>)
Universal Yarn & Tex Pvt Ltd, Kanpur	SHRI RAJIV K. BHARTIYA
BIS Director General	SHRI A. K. BERA SCIENTIST 'F' AND HEAD (TXD) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary

SHRI A. K. BERA
SCIENTIST 'F' AND HEAD (TXD), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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